Total No. of Printed Pages—3

2 SEM TDC BOTH (CBCS) C 4

2024

(May)

BOTANY

(Core)

Paper : C–4

(Archegoniate)

Full Marks : 53
Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct option of the following : 1×5=5

(a) The true elaters are found in *Riccia/ Marchantia/ Anthoceros.*

(b) The Pteridophytes differ from Bryophytes for presence of vascular tissue/motile spores/alternation of generation.

(c) Coralloid root is found in *Cycas/ Pinus/ Ginkgo.*

(d) Reticulate venation is found in the leaves of *Cycas/ Ginkgo/ Gnetum.*

(e) Bisporangiate cones are found in fossil plant *Rhynia/ Cycadeoidea/ Sphenophyllum.*

2. Write short notes on any *three* of the following : 4×3=12

(a) Homospory and heterospory

(b) Sporophyte of a *Polytrichum*

(c) Spore-producing organs of *Marsilea*

(d) Economic importance of gymnosperms

3. What is alternation of generation? Describe alternation of generation with the help of life cycle of *Anthoceros.* 2+10=12

Or

Describe any *two* of the following : 6×2=12

(a) Sporophyte of *Sphagnum*

(b) Antheridiophore of *Marchantia*

(c) Ecological importance of bryophytes

4. What is telome theory? Describe the elementary process of organogenesis in telome theory. 2+10=12

Or

Compare the following : 6×2=12

(a) Strobilus of *Selaginella* and *Equisetum*

(b) Apospory and apogamy in pteridophytes

5. Write short notes on any *three* of the following : 4×3=12

(a) Xerophytic characters of gymnosperms

(b) Male cone of *Pinus*

(c) Angiospermic characters of *Gnetum*

(d) '*Ginkgo* is a living fossil'

(e) Theories of fossilization

★ ★ ★